

CORRESPONDENCE/MEMORANDUM

STATE OF WISCONSIN

Date: August 2, 1985

File Ref: 3600

To: Charles Higgs - Green Bay

REC'D DNR

From: James R. Huntoon

AUG - 8 1985

GREEN BAY

Subject: Approval of the Pine River System, Waushara County, Fishery Area Master Plan

On July 24, 1985, the Natural Resources Board ratified the Pine River System, Waushara County, Fishery Area Master Plan, following approval of the plan by Secretary Besadny. The Master Plan Task Force consisting of Chairman Michael Primising, Bill Hoffman, Jerry Staehle, Terry Thompson and Elward Engle recommended combining the approved Pine River Fishery Area with remnant areas on the Upper Pine River, Kaminski Creek and on Little Silver Creek to create the Pine River System Fishery Area with an acreage goal of 1,996.0 acres. At present, 1,650.52 acres have been acquired in fee title and 8.59 in perpetual easements. The fishery area is 83.12% complete with 336.89 acres yet to be acquired from willing sellers.

Attached are 20 copies of the approved master plan and the original maps for your district files, to answer inquiries from the public and for future use.

The implementation element of the master planning process should be completed next. You are requested to supply this office with a copy on or about January 1, 1986.

Please convey my appreciation to the task force for a job well done in the completion of this master plan.

RB:mg
Attach.

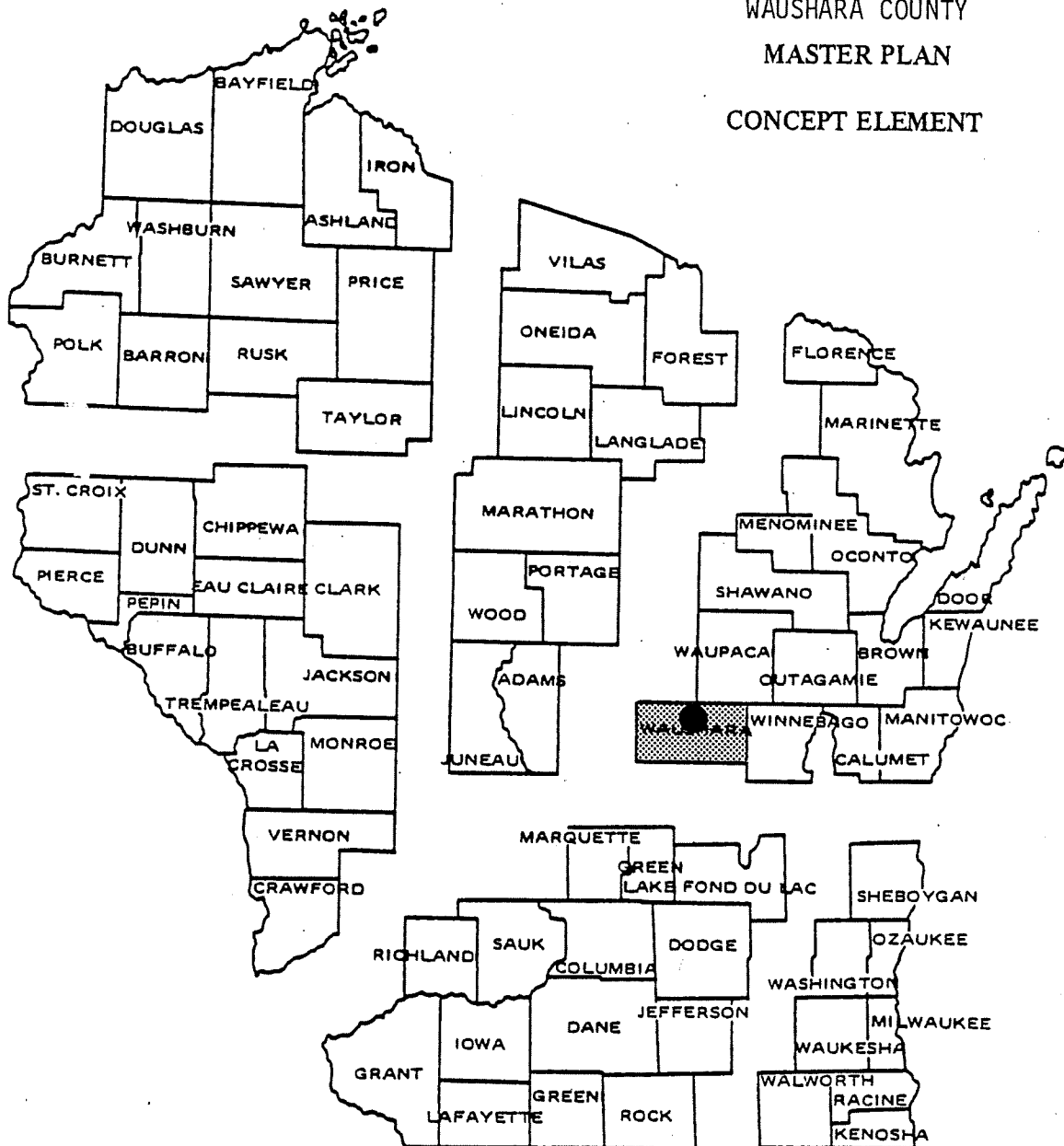
cc: James T. Addis - FM/4
Carl Evert - OL/4
Vern Hacker, Oshkosh
Craig Karr - AD/5

PROPOSED PINE RIVER SYSTEM FISHERY AREA

WAUSHARA COUNTY

MASTER PLAN

CONCEPT ELEMENT



Property Task Force

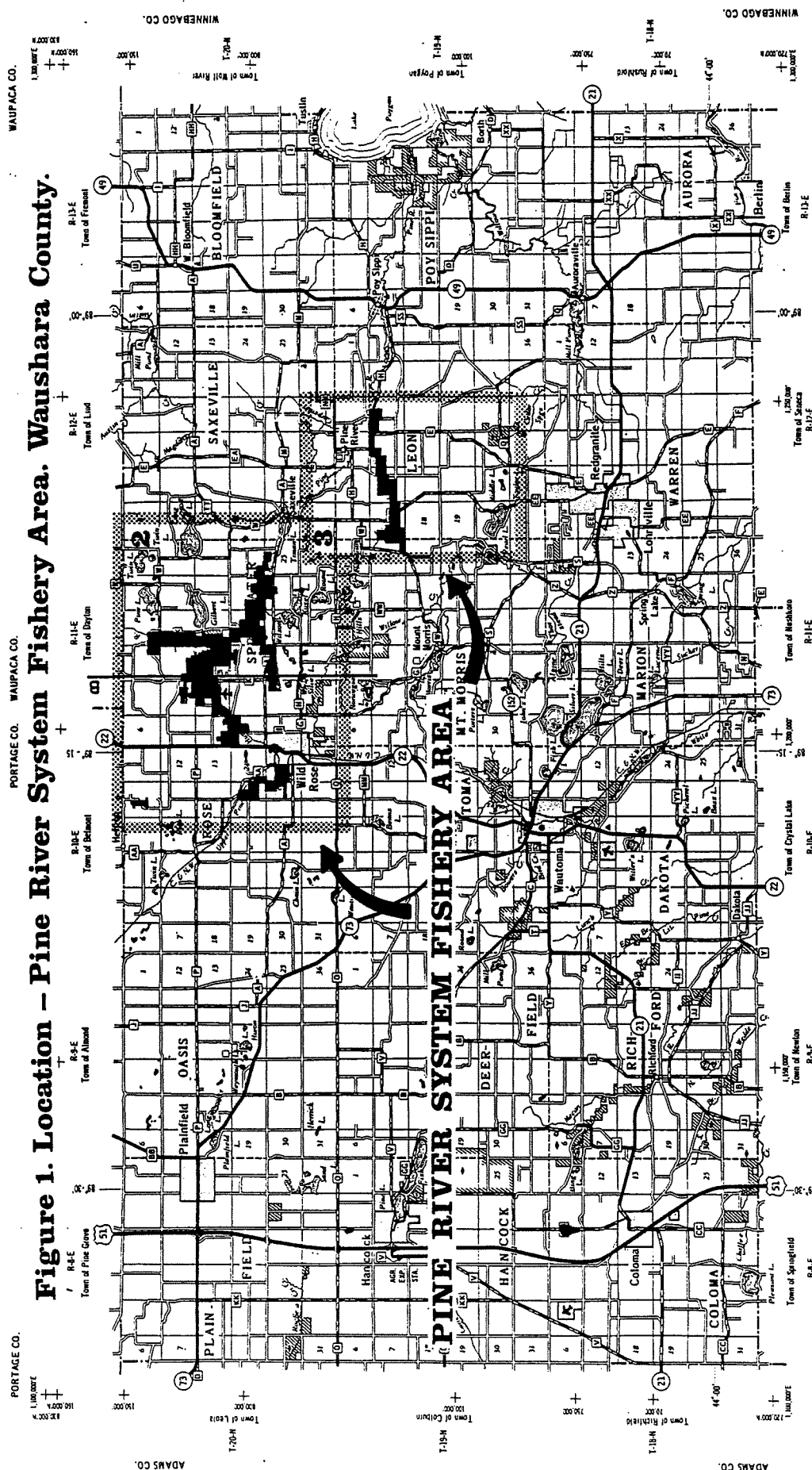
Leader - Michael Primising - Fish Manager
Bill Hoffmann, Michael Folgert - Foresters
Jerry Staehle - Wildlife Technician
Terry Thompson - Fish Technician
Elward Engle - Real Estate Agent

Approved by Natural Resources Board

July 24, 1985

Date

Figure 1. Location – Pine River System Fishery Area. Waushara County.



MARQUETTE CO. LEGEND

| | | |
|------------------------|---------------------|-----------------------------------|
| U.S. & STATE COUNTY | U.S. Highway No. | Green Farm |
| State Highway No. | State Highway No. | County Seat |
| County Hwy. Letter | County Hwy. Letter | Unincorporated Village |
| Railroad | Railroad | School |
| Dam | Dam | Public Hotel or First-Class Hotel |
| State Boundary | State Boundary | Hospital |
| County Boundary | County Boundary | Ranger Station |
| Car Town Boundary | Car Town Boundary | Public Camp or Picnic Ground |
| Corporate Limits | Corporate Limits | State Park |
| Nat'l & State Parks | Nat'l & State Parks | without Campsites |
| Angler | Angler | with Campsites |
| Fish Hatchery | Fish Hatchery | County Park |
| | | without Facilities |
| | | with Facilities |
| | | Wayside |
| | | without Facilities |

* Surface types as shown need not show

MILES OF HIGHWAY
as of Jan. 1, 1975

| | |
|-------------------|-----|
| TAYE | 134 |
| COUNTY | 133 |
| LOCAL ROADS | 116 |
| TYNER ROADS | 3 |

.. FOR COUNTY.....1780

[illegible]

MARQUETTE CO. GREEN LAKE CO.

GREEN LAKE CO.

| | |
|------------|-------------|
| Land Area | 628 Sq. Mi. |
| Population | 14,259 |
| Co. Seal | Blackhawk |

CONCLUSIONS

| | | | | | | | | | | | |
|----|----|----|----|----|----|----|----|----|----|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 |

WAUSHARA CO.
DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS
STATE OF IOWA BUILDING
MADISON, WISCONSIN

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011 1012 1013 1014 1015 1016 1017 1018 1019 1020 1021 1022 1023 1024 1025 1026 1027 1028 1029 1030 1031 1032 1033 1034 1035 1036 1037 1038 1039 1040

- Grid based on Wisconsin coordinate system, south-central zone

TABLE OF CONTENTS

Page

SECTION I - ACTIONS

| | |
|--|---|
| GOALS, OBJECTIVES AND ADDITIONAL BENEFITS. | 1 |
| RECOMMENDED MANAGEMENT AND DEVELOPMENT PROGRAM | 1 |

SECTION II - SUPPORT DATA

| | |
|--|----|
| BACKGROUND INFORMATION | 7 |
| RESOURCE CAPABILITIES AND INVENTORY. | 12 |
| RESOURCE MANAGEMENT PROBLEMS | 21 |
| RECREATION NEEDS AND JUSTIFICATIONS. | 22 |
| ANALYSIS OF ALTERNATIVES | 23 |
| APPENDIX | |

SECTION I - ACTIONS
GOALS, OBJECTIVES AND ADDITIONAL BENEFITS

Goals: To develop, manage, preserve and protect the Pine River System Fishery Area, Waushara County, in conformance with sound scientific management practices and to provide multiple benefits and public uses consistent with the area's natural resource capabilities.

Annual Objectives:

1. Provide 4,800 angler trips for brown and brook trout fishing with an average catch of 0.5 trout per hour.
2. Provide 16,800 participant days of hunting for white-tailed deer, waterfowl, ruffed grouse, woodcock, cottontails, and squirrels, and 2,600 participant days of trapping for raccoons, foxes, muskrats, mink and beaver.
3. Maintain productive stands of timber and utilize approximately 100 cords of firewood for home heating through firewood sale permits.

Annual Additional Benefits:

1. Provide 5,000 participant days of other recreational and educational uses including picnicking, nature study, field trips, berry picking, hiking, cross-country skiing and snowmobiling.
2. Contribute to the habitat of a variety of native or migratory nongame species including endangered or threatened species.
3. Enhance water quality through streambank protection and erosion control techniques on adjacent uplands.

RECOMMENDED MANAGEMENT AND DEVELOPMENT PROGRAM

The Department recommends that the presently approved Pine River Fishery Area, which includes the Lower Pine River, Jones, Davis, Clayton and Humphrey Creeks, be combined with the remnant fishery areas on streams that drain into the fishery area on the Upper Pine River, Kaminski, and Little Silver Creeks, and that in the future it be known as the Pine River System Fishery Area, Waushara County (Figure 1).

Currently, the acreage in state ownership on the proposed system is:

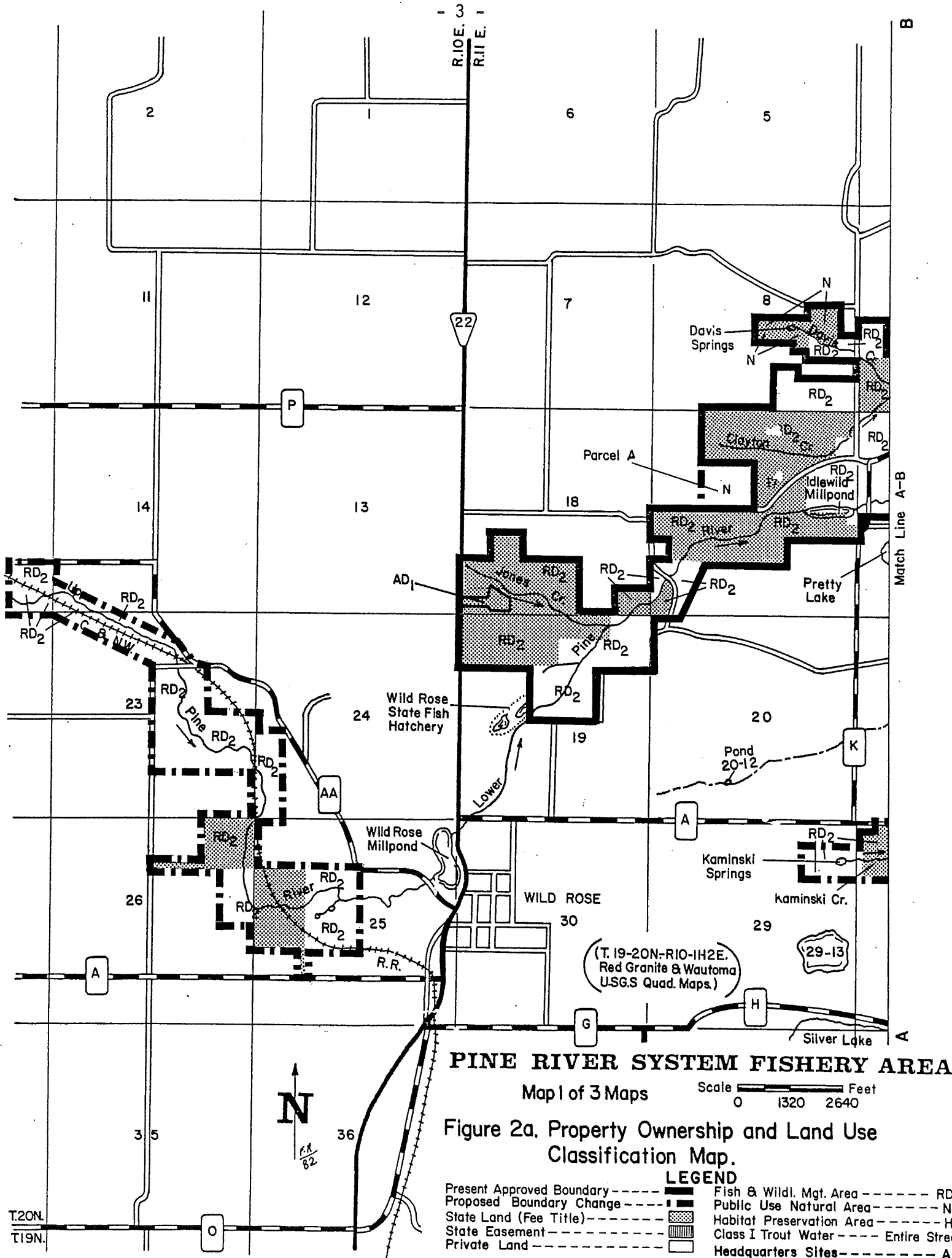
| Method of Purchase | Acrees Owned | Proposed Additions (in acre) | | |
|--------------------|-------------------------|------------------------------|------------------------|-----------------------------|
| | Pine River Fishery Area | Upper Pine R. Remnant | Kaminski Creek Remnant | Little Silver Creek Remnant |
| Fee Title | 1,325.80 | 50.48 | 99.95 | 174.29 |
| Perpetual Easement | 8.59 | 0.0 | 0.0 | 0.0 |
| Acrees Owned | 1,334.39 | 50.48 | 99.95 | 174.29 |
| Totals | 1,334.39 | | 324.72 | |
| Grand Total | | | 1,659.11 | |

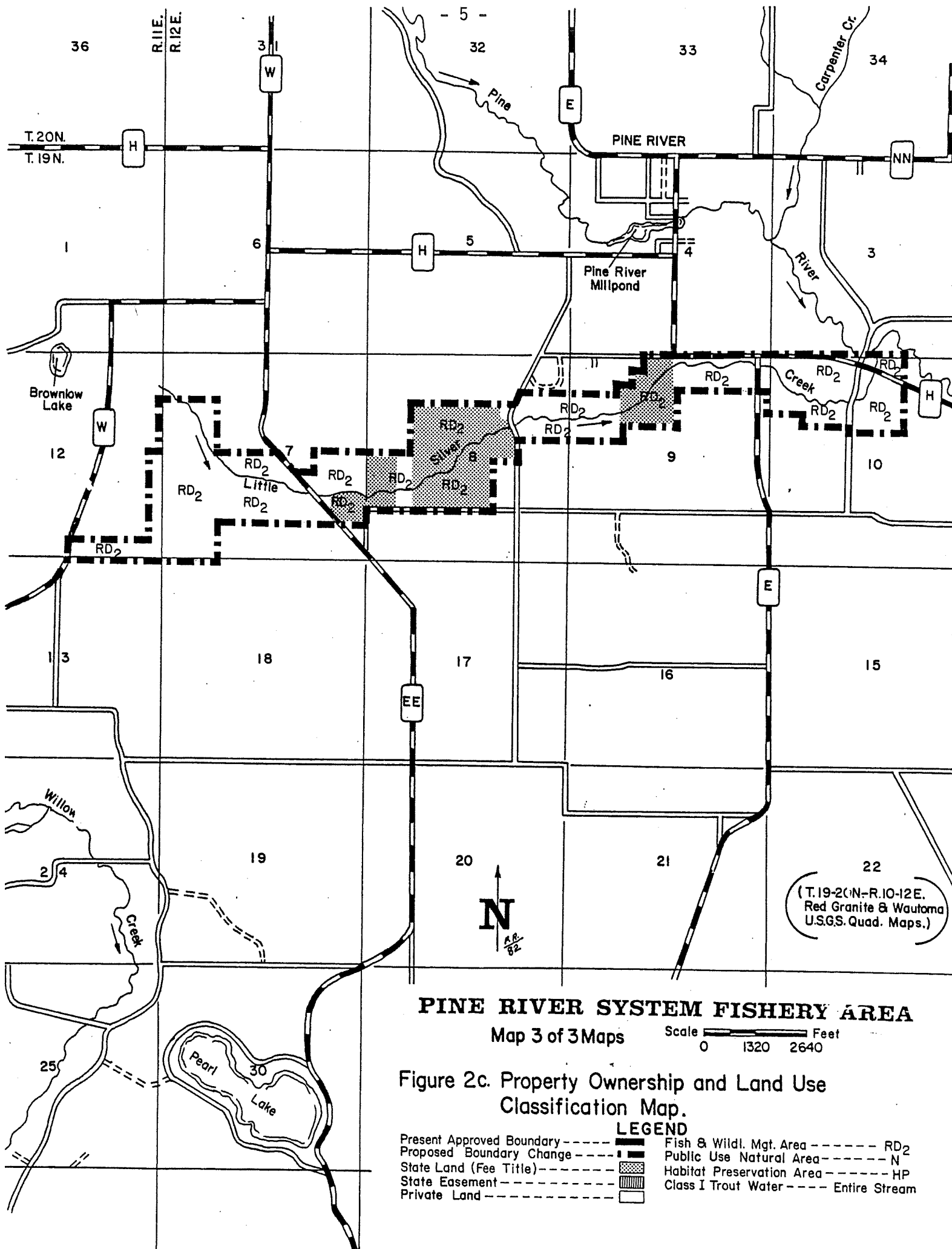
If the system fishery area is approved, a total of 1,650.52 acres will have been acquired in fee title and 8.59 acres in perpetual easement for a grand total of 1,659.11 acres (Figures 2a, b and c).

The previously approved Pine River Fishery Area currently has an acreage goal of 1,496 acres, with 161.61 acres yet to be acquired. To continue a viable and realistic acquisition program, an increase in the system acreage goal of 500 acres is recommended. If approved, the new acreage goal for the system would be 1,996 acres, leaving 336.89 acres to be acquired.

If the recommendation to create the Pine River System Fishery Area is approved by the Natural Resources Board using the proposed boundary with the addition of the 3 remnant areas, the following actions will be necessary.

1. Natural Resources Board establishment of the Pine River System Fishery Area with an acreage goal of 1,996.0 acres.
2. Transfer of 324.72 acres from Waushara County Remnant Areas to the Pine River System Fishery Area for properties already acquired.
3. Reduction of the Waushara County Remnant Area by 324.72 acres for properties already acquired.
4. Reduction of the Waushara County Remnant Area by an additional 75.28 acres, and of the Outagamie County Remnant Area by 100.00 acres, and their transfer to the Pine River System Fishery Area acreage goal for further land acquisition.





Thus, if approved, and by combining the current acreage goal of 1,496.0 acres with the transferred 324.72 remnant acres from lands already acquired, and the additional 175.28 acres transferred from Waushara and Outagamie Remnant Habitat Programs, a new acreage goal of 1,996.0 acres will result.

Trout stream habitat development (Figures 3a,b,c), funded with trout stamp monies will play a major role in providing adequate future trout populations to offset increased fishing pressure. Within the next 6-10 year period, it can be expected that approximately 3.0 miles of new development will be proposed. Cost in 1985 dollars is estimated at \$17,000 per mile. As new properties are purchased from willing sellers, habitat development activities will be expanded based on needs identified by surveys and evaluation procedures.

Trout Unlimited chapters have been very active and supportive of stream improvement projects in central Wisconsin. This action organization can be expected to initiate cooperative habitat improvement projects in the future. We welcome this group's dedication and service.

Maintenance activities will be carried out on instream devices presently scattered throughout approximately 2.6 miles of stream, vegetative maintenance will continue on approximately 2.1 miles of stream to encourage marsh-meadow growth at the stream edge. The maintenance of property line fences, parking lots and boundary posting will be a continuing program. The estimated annual maintenance cost is \$1,100.

The estimated cost in 1985 dollars to purchase the remaining 336.89 acres is \$404,000. Acquisition priority will be given to those waters that contain major trout spawning grounds and nursery areas, and spring sources that are the lifeblood of the system.

It is recommended that on the next evaluation of the master plan, consideration be given for expansion to the ultimate, long-range acreage goal of acquiring all properties within the system boundary. This amounts to 2,289 acres. Estimated cost in 1985 dollars is \$2,750,000.

Three revisions of the boundary are proposed. The addition of 40 acres within the boundary, shown as Parcel A on Figure 2a is proposed at the request of the Scientific Areas Preservation Council. If, and when this acreage is acquired, it will be classified as a public use natural area. This tract of lowland woods has a diverse understory vegetation that includes orchids and wild ginseng. Maintenance of the cover-type helps maintain water quality of Davis and Clayton Creeks.

Parcel B on Figure 2b consists of 20 acres the Department recommends should be included within the new boundary. It contains the headwaters and major springs of a class brook trout stream known as the Besnah Feeder. Approximately 80% of the stream inside the current boundary is state owned and it contributes excellent quality spring water to the Pine River.

A boundary deletion of 10 acres is shown as Parcel C on Figure 2b. This piece of land lies south of County Trunk Highway "A" and is of no significance to the stream system. The land is currently privately owned.

The development of accesses will be provided where needed on new land purchases. Vehicular traffic will be kept to a minimum in an effort to maintain and enjoy outdoor experiences.

Wildlife management actions that will be considered include expanding food and cover by planting, thinning and sharecropping to provide food patches, nesting cover and to maintain openings.

Swamp hardwood is the most extensive timber type. Potential exists for limited timber sales and some fuelwood cutting operations. However, logging will be confined mostly to winter months where frozen ground conditions exist.

The upland oak timber is generally of poor quality. Occasional commercial timber sales will be considered primarily for fuelwood sales. Firewood permits for home consumption will be issued on a first-come, first-served basis at a charge of \$6.00 per cord.

Mostly downed timber will be sold, and provisions will be made to keep some of the standing dead trees and snags as den and nest trees. Some of the oak timber will be utilized for piling and planking materials in the construction of instream devices required for habitat improvement projects.

All areas proposed for development or timber harvesting will be examined for the presence of endangered and threatened animals and plants. If listed species are found, actions will be suspended until the District Endangered and Nongame Species Coordinator is consulted, the site evaluated and appropriate protective measures taken.

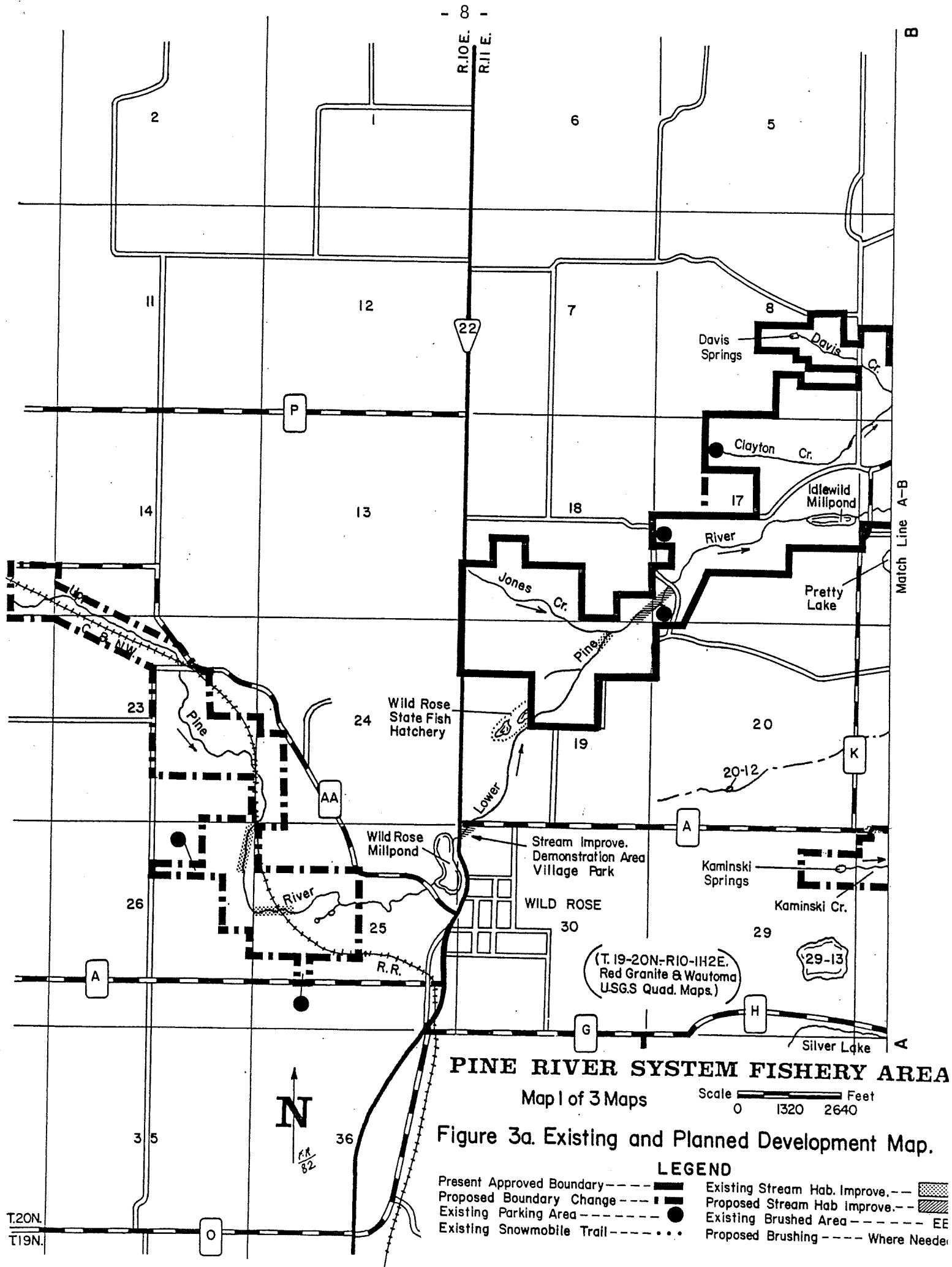
A complete biological inventory of the property will be conducted as funds permit. Additional property objectives may be developed following completion of such a survey.

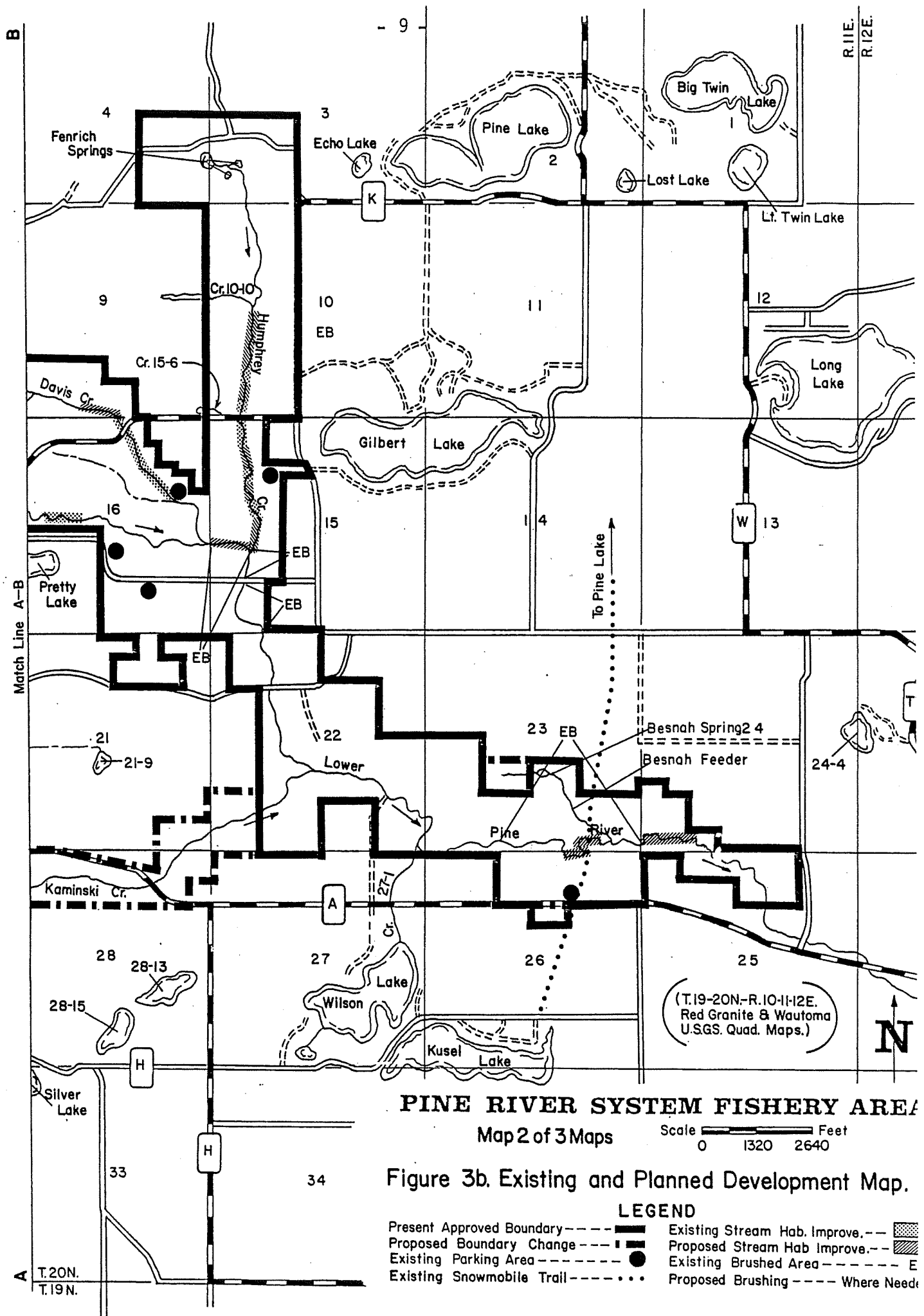
Two current snowmobile trails (Figures 3b and 3c) will continue to be maintained by the county association through land use agreements. Any proposed additions or changes in routes will be weighed against the impact on the resource, and compatibility with public interests and uses.

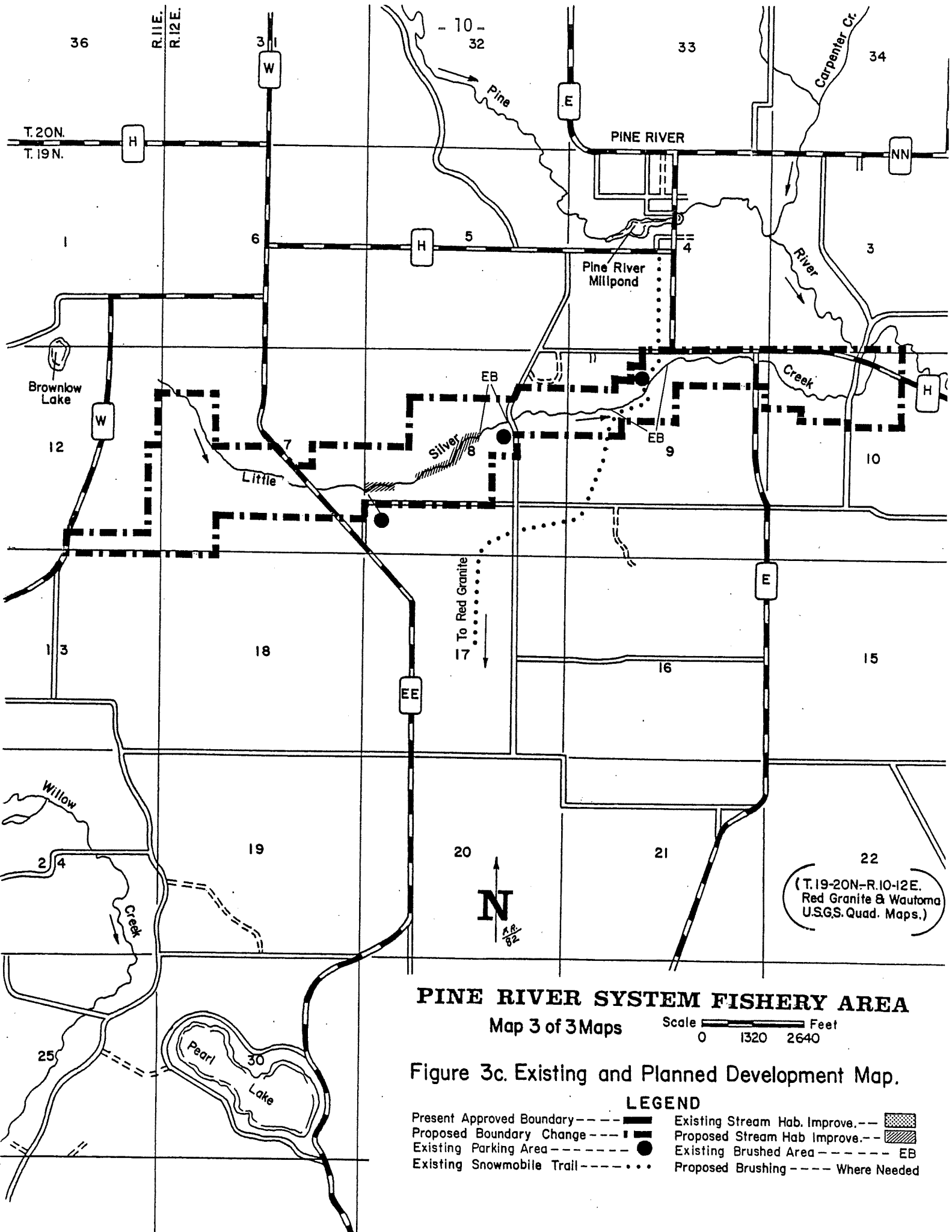
The lands will be open to public fishing, hunting, trapping, and educational tours. Cross-country skiing and snowshoeing will be allowed although no established trails will be offered on the fishery area. No overnight camping will be allowed on public lands.

SECTION II - SUPPORT DATA BACKGROUND INFORMATION

The Pine River System Fishery Area includes the most productive trout water on the Pine River and its major tributary streams. The system is located in central Wisconsin in the County of Waushara. The name "Waushara" is an English derivation of an Indian word meaning "Good Earth". Surface waters of natural lakes and streams are a product of the land and "good trout fishing" is synonymous with the good waters of this fishery area.







PINE RIVER SYSTEM FISHERY AREA

Map 3 of 3 Maps

Scale 0 1320 2640 Feet

Figure 3c. Existing and Planned Development Map.

LEGEND

- | | | |
|-----------------------------------|------------------------------------|--|
| Present Approved Boundary----- | Existing Stream Hab. Improve.-- | |
| Proposed Boundary Change----- | Proposed Stream Hab. Improve.-- | |
| Existing Parking Area-----● | Existing Brushed Area-----EB | |
| Existing Snowmobile Trail-----••• | Proposed Brushing-----Where Needed | |

The watershed is in a rural setting characterized by gently rolling farmlands interspersed with woodlands, and pine and Christmas tree plantings. Pastoral is the oft-used adjective for this land scene.

The waters of this proposed fishery area system are located in North Central Waushara County (Figure 1) and include the Upper and Lower Pine River, Jones, Davis, Clayton, Humphrey, Kaminski, Besnah and Little Silver Creeks.

It has been said that fishing is good for the body and soul of man. The Department of Natural Resources and its predecessor, the Wisconsin Conservation Department, has long recognized a management objective of contributing to the maintenance and improvement of the health, welfare and quality of life of present and future generations by providing for enjoyable recreational opportunities. With this objective in mind, in 1958 the Wisconsin Conservation Commission granted authority to establish an acquisition program on portions of the Pine River and tributary streams downstream from the Village of Wild Rose.

A property boundary and acreage goal of 2,357.90 acres was originally established. Over the years, the acreage goal within the boundary has been reduced to make acres available to establish other statewide fishery areas without increasing the statewide land ownership goal of 1,375,000 acres established in 1971.

In 1961, the Commission authorized a Waushara County remnant areas acquisition program which has a current acreage goal of 3,090.40 acres. Under this program, 324.72 acres have been acquired on the Upper Pine and tributary streams of the Pine River. There are approximately 11.3 miles of stream currently in public ownership plus 0.95 acre of headwaters spring pond areas.

Streams within the proposed system were stocked annually with an average of 2,800 trout until 1973. From 1969 through 1972, all hatchery trout were finclipped to determine their contribution to the population. In 1972, a sample of 3,899 trout was taken in an electro-fishing survey of 6.8 miles of stream. A total of 33 fish, or only 0.8% were of hatchery origin. Stocking was discontinued in 1973.

A total of 13 parking lots have been provided. These are small pull-off areas that accommodate four to eight vehicles (Figure 3).

Sharecropping agreements with local farmers exist on 112 state-owned acres that continue to contribute to wildlife food patches for game and nongame species. A total of 20% of the grain crops are left in the field for winter food patches.

Instream habitat improvements completed in the past are scattered throughout the fishery area on 14,100 feet of stream. Some of the original instream development work dates back to WPA and CCC camp days of the 1930's. A few remnant structures from this time period can still be found today. Most of the structures still existing were installed in the decade of the 1960's. Little or no maintenance has been necessary on them to the present time (Figure 3).

Streambank brush and tree control previously completed is scattered along 11,350 feet of stream. Volunteers from Trout Unlimited of the Central Wisconsin and Fox Valley Chapters have been very active and instrumental in streambank vegetation control measures. Hundreds of hours of donated labor on cooperative projects by the 2 organizations have saved the department time and money and have contributed toward streambank stabilization and improved fishability.

Pheasants were stocked on the fishery area in the past, but this practice was discontinued due to the artificial nature and low quality hunting provided. Habitat types are not compatible for pheasants.

two snowmobile trails have been established that cross the system fishery area. They are groomed, posted and maintained by the county snowmobile association in cooperation with the county parks office.

Other uses of state-owned fishery area lands include: trapping, waterfowl hunting, picnicking, nature study, berry and mushroom picking, hiking, cross-country skiing and snowshoeing. Occasional field trips are conducted for local school ecology and biology classes.

Firewood permits for home consumption are issued for downed timber. A \$6.00 fee is charged per cord removed.

RESOURCE CAPABILITIES AND INVENTORY

Geology and Soils: The most prominent preglacial geological formation present in Waushara County is an extensive layer of Upper Cambrian (Potsdam) sandstone lying immediately beneath the surface deposits of glacial drift and alluvium. Extensive surface erosion occurred before the glacial deposits were laid down and is responsible for the great variance in the thickness of this formation (from a few feet to 750 feet).

The geological features of the Pine River Fishery system are associated with the end and ground moraine of the Cary Glacier and is characterized by deposits of unconsolidated, mixed earth materials. Abundant supplies of underground water are available in the Potsdam sandstone formations and in the surface deposits of glacial drift, alluvial sands and gravels.

The sandy soils readily allow water from excess precipitation (which annually averages approximately 30 inches) and thawing snow and ice to percolate into the groundwater table. Stable stream flows are directly related to these factors.

The light sandy materials are poor agricultural soils unless irrigated and heavily fertilized.

Fish and Wildlife: Management of the fishery is primarily directed at the wild brown trout and native brook trout. The brown trout is the dominant trout species throughout the system except in Little Silver Creek where brook trout dominate. The upper reaches of Davis-Clayton Creek, Kaminski Creek, Jones Creek, Besnah Feeder and Upper Pine River also support fairly good populations of brook trout.

Trout populations are dynamic in nature and vary from year to year due to weather as well as physical and biological factors in the streams. They, in turn, affect year class strength, growth rate and survival. Fishery survey data gathered with electro-fishing gear (1971-72) substantiated the presence of a fine trout population. The Class I brown trout portions of stream (Figures 2a, b and c) can normally be expected to support a minimum of 90 pounds and 513 trout per acre of water whereas the brook trout sections will support at least 65 pounds and 371 fish per acre. Natural reproduction is sufficient to sustain fishable numbers of wild trout without stocking hatchery fish.

Other fish species present include white and hog suckers, creek chubs, various dace species, mottled sculpins and brook lampreys. All forage species are rated as of common abundance. An occasional sunfish and bullhead round out the complement of fish types present.

Amphibians sampled on fishery surveys include green and leopard frogs, and spring peepers. Snapping and painted turtles are known to be present.

The major game animals and furbearers in the fishery system are common to central Wisconsin and include white-tailed deer, gray and fox squirrels (with occasional melanistic individuals), cottontails, ruffed grouse, mallards, teal, woodducks, woodcocks, raccoons, muskrats, foxes, beaver, otter and mink. A variety of nongame birds and animals are present on the area both seasonally and permanently. Sandhill cranes inhabit low marsh areas in spring and summer and successfully nest there.

Vegetative Cover: A forest reconnaissance survey of state-owned lands within the boundary of the fishery area was conducted in 1982 and 1983.

Forest cover types are shown in Table 1 in detail and in general on Figures 4a, b, and c.

Table 1 - Forest Reconnaissance cover types on the Pine River System Fishery Area, Waushara County

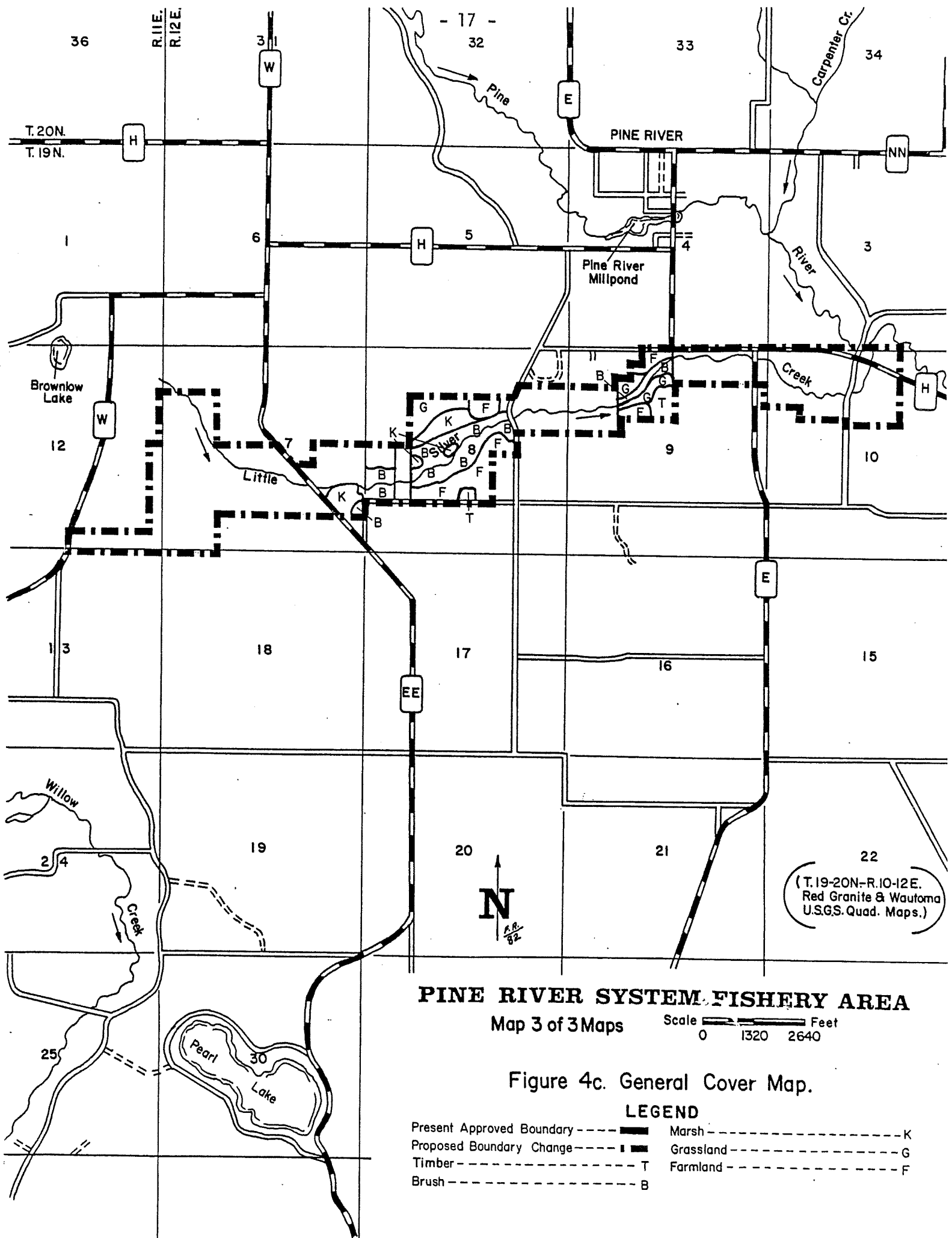
| <u>Types</u> | <u>Acreage</u> |
|-------------------------|----------------|
| Oak | 365 |
| Swamp Hardwoods | 429 |
| Tamarack | 28 |
| Northern Hardwoods | 13 |
| White Birch | 29 |
| Red (Norway) Pine | 87 |
| Jack Pine | 9 |
| White Pine | 94 |
| Spruce (Norway) | 12 |
| Marsh and Lowland Brush | 392 |
| Grass and Croplands | 201 |
| TOTAL | 1,659 |

Swamp hardwood is the most extensive timber type on this property and consists largely of black ash and red maple, with minor components of elm, tamarack, birch and basswood. Most of these stands occur in poorly drained soils and contain understories largely composed of lowland brush. Logging here is severely limited and volumes range from poor to fair with 7 cords per acre and 1,268 board feet per acre being average estimates. The potential exists for limited timber sales and some fuelwood cutting operations, but logging will be confined mostly to winter months.

The oak is generally of poor quality and consists of a mixture of red, black, burr, and northern white oaks. Trunk deformities will account for most defects in this type. Densities again are generally poor to fair with the average estimated as being 9 cords/acre and 2,817 board feet per acre for pole and saw timber stands, respectively. Occasional timber sales are possible, but commercial use is primarily related to fuelwood sales.

Most of the pine and spruce (with the exception of white pine) occur in plantations with densities being generally good. The plantations were established in the 1950's and early 1960's and are pole-sized at present. Thinnings will be conducted as needed and these stands will be managed on even-aged rotations. Current volume averages 32 cords per acre in the plantation-growth stands. Disking will be done around several large pine plantations to improve fire protection.

The majority of the white pine stands on this property are of natural origin and consist mostly of fair quality white pine sawtimber averaging 5,094 board feet per acre. These stands will also be managed on even-aged rotations with periodic thinnings and timber stand improvement to favor natural white pine regeneration.



In all cases, timber harvest operations will take into account aesthetic and multiple-use management since the primary use of this property is for recreation, hunting and fishing.

Endangered and Threatened Species: No endangered or threatened species of fish, amphibians, molluscs, mammals, birds, reptiles, or wild plants are known to be present on the property.

Surface Water Resources: The Pine River is the largest stream within the fishery area. It is a clear, hardwater trout stream flowing through much of northern Waushara County. For management purposes, the Pine is split into the Upper Pine River (above Wild Rose Millpond) and the Lower Pine River (below Wild Rose Millpond). After leaving the Wild Rose Millpond outlet, waters from the Wild Rose fish hatchery and Jones (Weichering) Creek enter in Section 19, T20N, R11E. The Pine then flows through the Idlewild, Saxeville, Pine River and Poysippi Millponds before entering Lake Poygan and the Wolf-Fox River system. From the Poysippi Millpond upstream, some five miles, the stream is Class II trout water, none of which is included in the proposed system fishery area. The remainder of the stream to the headwaters is Class I water (approximately 19.8 miles). The Pine is a warmwater stream below the Poysippi Pond.

Tributary streams of the Pine River include: Davis Creek, which enters the Pine River in Section 16, T20N, R11E, Humphrey Creek, which merges with the Pine is located in Section 22, T20N, R11E, the outlet stream from Wilson Lake contributes flow in Section 22, T20N, R11E, and the Besnah Feeder meets the Pine in Section 23, T20N, R11E.

A feeder stream known as Popple Creek enters the Pine River in Section 30, T20N, R12E outside of the fishery area. The last two major tributary streams are Carpenter Creek that junctions in Section 3, T19N, R12E and Little Silver Creek in Section 10, T19N, R12E.

Idlewild Pond is a warmwater flowage used for hydro-electric power. The pond is detrimental to downstream trout waters of the Pine River. Surface water discharges from the pond reach 75°+ in summer and close to 32°F during the critical trout egg hatching period of winter. Both temperatures are extreme for good trout production. The dam that controls water levels and temperatures also blocks movement of migrating fish during the spawning period and forces them to deposit their eggs where they will certainly die. Similar detrimental effects are caused by the Wild Rose, Saxeville, Pine River and Poysippi Ponds, each compounding the problem.

Davis, Fenrich, Besnah and Kaminski Spring Ponds are the headwaters springs of the 4 streams of the same names. Each contains trout and major trout spawning grounds are associated with the springs, or the areas immediately downstream.

The Pine River in the fishery area is a fairly large waterway averaging 30 feet wide with an average summer flow of around 60 cfs.

Stream gradients for the system vary considerably. The average gradient of the Pine River is 5.9 feet per mile while tributary stream gradients fall between 2.0 feet per mile on Davis Creek to 7.3 feet per mile for Jones Creek. A variety of scenery is provided ranging from slow moving, sluggish water sections to some beautiful rapids areas.

Table 2a. Streams of the Pine River System Fishery Area, Waushara County:

| STREAM | LENGTH IN MILES (WITHIN THE AREA) | | | TOTAL MILEAGE OF THE STREAM |
|---------------------|--------------------------------------|----------|----------------|--------------------------------|
| | CLASS I | CLASS II | WARM- WATER | |
| Upper Pine River | 3.40 | 0 | | 5.00 |
| Lower Pine River | 9.80 | 0 | | 19.00 to Poysippi |
| Jones Creek | 0.90 | 0 | | 0.90 |
| Davis-Clayton Creek | 2.20 | 0 | | 2.20 |
| Humphrey Creek | 2.80 | 0 | | 2.80 |
| Kaminski Creek | 2.10 | 0 | | 2.10 |
| Little Silver Creek | 5.60 | 0 | | 5.60 |
| Cr. 10-10 | | | 0.33 | 0.33 |
| Cr. 15-6 | 0.75 | | | 0.75 |
| Besnah Feeder | 0.58 | | | 0.58 |
| TOTALS | 28.13 | 0 | 0.33 | 39.26 |

Table 2b. Ponds Within the Pine River System Fishery Area, Waushara County

| NAME | ACRES | MAXIMUM DEPTH IN FEET | TOTAL ALKALINITY | pH |
|------------------|-------|-----------------------------|---------------------|-----|
| Idlewild Pond | 3.60 | 7.0 | 202.0 | 7.6 |
| Davis Springs | 0.65 | 4.5 | 175.0 | 8.2 |
| Fenrich Springs | 1.70 | 15.0 | 202.0 | 7.4 |
| Kaminski Springs | 0.30 | 4.0 | 196.0 | 8.2 |
| Besnah Springs | 0.40 | 6.0 | -- | -- |
| TOTAL | 6.25 | | | |

Historical and Archaeological Features: The State Historical Society reports that there are no buildings or structures of known historical or architectural significance within the system. There are seven known archaeological sites within the system that are chiefly campsites and some burial mounds. Their specific locations are maintained in the files of the State Historical Society and the Wautoma Area office of the Department of Natural Resources. In addition to the known locations, there is a very high probability that there may be other, as yet undiscovered, sites within the system.

Before any movement of soils or buildings takes place on the fishery area, the Department of Natural Resources will consult with the Historical Society for advice.

Ownership: The current approved acreage goal on the fishery area is 1,496 acres and 1,334.39 acres are under state ownership with a balance of 161.61 acres remaining to be acquired. Of the total acreage owned, 1,325.80 acres are in fee title, and 8.59 in perpetual easement.

Current Use: The waters of the system are very popular for trout fishing with angling pressure particularly heavy during the first part of the season. It reduces to a moderate level by the end of June and continues stable for the rest of the season. Based on creel census data and general observations, it is estimated that fishing pressure on the entire area averages 150-200 participant days per mile. Fishing pressure on state-owned property is greater and approaches 425 participant days per mile.

The present public ownership lands are located on prime deer range. Waushara County consistently ranks among the top six counties for registered deer killed annually in both the bow and gun seasons. Hunting pressure in excess of 50 hunters per square mile is common on opening weekend of the gun season.

Land Use Classification: Almost all the lands within the boundary of the fishery area are best suited for classification as resource development areas RD₂ - Fish and Wildlife Management, because of its size, location, physical and biological features and recreational use.

There are three exceptions to the RD₂ land use classification which are as follows:

1. Davis Creek Spring Pond and outlet stream is recommended for classification as a Public Use Natural Area (N). Included are approximately 35 acres located in Section 8, T20N, R11E (Figure 2a). It is a small, cold, hardwater pond fed by several springs. The pond outlet consists of a series of small, sand-bottomed, braided channels that wind through a sedge meadow which is fen-like in composition. Tamarack and lowland hardwoods surround the pond. The pond is 4.5 feet deep with a surface area of approximately 0.65 acre.
2. At the request of the Scientific Areas Preservation Council, a 40-acre segment of land is being recommended for inclusion within the boundary, to be designated as a Public Use Natural Area (N), if, and when it is acquired. It contains unique vegetation, including orchids and wild ginseng, and is shown as Parcel A on Figure 2a.
3. Fenrich Springs is a natural area of local significance. At the present time, it is recommended for classification as a Habitat Preservation Zone, (HP) (Figure 2b). The proposed area includes approximately 50 acres. Fenrich Springs includes a small 1.7-acre, 15-foot deep spring pond, and a spring run which drains into Humphrey Creek. There are small, scattered patches of tamarack, and several acres of wetland. The wetland along the spring run is dominated by burreed and it grades into a drier fen-like zone along the wetland edge. The bottom of the pond is marl and muck, the spring run bottom being mostly solid sand.

RESOURCE MANAGEMENT PROBLEMS

Vegetation Problems: A problem that is characteristic of the overall fishery system is dead, dying and leaning trees that have fallen, or will fall, into the river channel. This results in the slow-down of flow, and frequent changes in stream course with subsequent bank erosion and general widening of the channel.

Dutch elm disease and oak wilt are chronic problems.

In some locations problem growths of speckled tag alder shade out aquatic vegetation in the stream reducing the production of basic trout food organisms (stonefly, mayfly, and caddisfly larvae). Bank erosion results from excessive brush growths as grasses and sedges are unable to compete. Lack of suitable trout cover in the form of pool and bank cover restrict production of larger sized trout. Habitat development is needed on these areas.

Beaver Problems: Beaver dams and activity are a continuing problem. These dams interfere with trout movement at spawning time, silt over and destroy spawning areas and adversely affect the reproduction of fish. Dams materially affect water flow, levels and temperatures. Beaver flowages contribute to wildlife, furbearers and waterfowl habitat, but present department policy requires maintaining beaver populations at low levels to avoid adversely impacting Class I trout waters.

Millpond Dams: Man-made dams adversely affect water quality for coldwater fish species. There are five millpond dams on the Pine River from Wild Rose to Poysippi. Two dams affect the waters included in this master plan (Wild Rose and Idlewild) but all dams are harmful to the trout population on the stream. The resulting shallow, silted-in, weedy millponds slow and stop the rapid movement of springwater downstream. The surface water discharge over these dams cause water temperatures to reach 75-85° during the summer months to the detriment of native trout. Dams prevent adult spawners from moving upstream to spawning areas. Additionally, millponds freeze over during the spawning period and concentrate spawning trout below dams in areas where the eggs won't hatch because the water flowing over the dams is too cold in winter months (near 32°F).

Groundwater Quality and Supply: There have been documented instances of groundwater pollution resulting from irrigation practices in central Wisconsin which indicate how existing human activities can degrade this fragile resource. Of concern is the widespread use of fertilizer and pesticides on agricultural lands in the watershed and their long-term effect on surface flows and groundwater tables that are the lifeblood of the stream system.

There is also serious concern for the affect on springs and streamflows by the pumping of water from high capacity wells during dry summer months. It is unknown what long-term effects this practice will eventually have on the groundwater aquifers that provide abundant spring water for trout and the stream system.

Illegal Use Activities: There are problems with illegal overnight camping while littering is a continuing problem at access parking areas. Law enforcement personnel have issued several citations involving these activities, helping to alleviate the problem.

Carelessness with fires during drought periods is a potential hazard to public and private property. Arson fires have been a problem here in central Wisconsin.

High hunter density during the deer-gun season and high fisherman density in the early part of the trout season spill over to adjoining private lands causing trespass problems and reducing the quality of the outdoor experience.

From 1/4 to 1/3 of department signs on public areas fall prey to vandals yearly.

Land Use: Platting and subdividing lands for private homes and recreational cottages is a common practice in Waushara County. Some of the stream frontage within the acquisition boundary is suitable for this type of development. This practice is incompatible with Natural Resources Board policy to acquire land, or to make it readily accessible to the more heavily populated areas of the state.

Funding: Limited funding sources available for acquisition are a major stumbling block which continues to adversely affect land acquisition now, and is expected to continue in the immediate future.

RECREATION NEEDS AND JUSTIFICATIONS

Because the trout streams in central Wisconsin are some of the best in the state, the protection, preservation and public access to these streams is of high priority. The opportunity to provide outdoor recreation in a natural environment close to large population centers is a goal of the Department of Natural Resources. The Pine River System Fishery Area presently provides such recreation, and with proper planning, management and protection will continue to provide quality recreation for future generations.

In 1980, the population of Waushara County was 18,526, while the population of the adjacent six counties totalled 275,482. Recreational areas like the one covered in this master plan are centrally located and comparatively near major metropolitan population centers including the Fox River valley (Oshkosh to Green Bay), Madison, Milwaukee and Chicago. At least 3 million people live within a few hours travel time and only a tank of gas or less away from the public recreational areas in Waushara County.

The latest report of license sales shows that in 1983, 4,071 resident fishing licenses, 930 husband and wife resident fishing licenses, and 2,210 nonresident fishing licenses of the various types were sold in Waushara County. Trout stamps were purchased by 2,002 people in Waushara County or 24.6% of all persons buying fishing licenses.

ANALYSIS OF ALTERNATIVES

The basic management program for the Pine River Fishery System is to protect, preserve, improve and provide public access to navigable waters of the state through public ownership. The analysis of alternatives is as follows:

Do Nothing: If management practices were discontinued, trout habitat would deteriorate over time to the point where stocking of hatchery reared fish would be necessary to provide short-term fishing opportunities.

The most productive trout streams in central Wisconsin have open marsh/meadow-type stream edges. This type of ecological niche would be lost through plant succession. Tag alder will encroach and cause deterioration of the stream channel. There will be a reduction of bank undercuts, pool cover and silting of spawning areas which will reduce egg survival and recruitment of fish. Excessive shade will reduce aquatic vegetation causing a decrease in invertebrate insect life. Dead and dying trees will fall into the channel altering the flow and causing difficult fishing conditions.

Past investments in land acquisition and development could not be adequately protected because of disjointed land ownerships. Key parcels of land in the fishery system could not be considered and in some way, controlled, to protect, maintain and improve for future generations.

Expensive habitat preservation and improvement activities such as streambank rip-rap, instream device construction, streambank vegetation control and alleviating chronic upland erosion problems would ultimately deteriorate. Private landowners lack the money and incentive to get similar work done. The end result leads to a general deterioration of a variety of habitat types.

Subdivisions with homes would eventually result on suitable stream frontage within the boundary and trespass restrictions would deny the general public suitable fishing frontage and access sites along this popular stream system.

A do nothing approach would mean increased pressure and public use of the existing areas under public ownership. Future users would find the present area overcrowded and the quality of the outdoor experience reduced.

Expand the Fishery Area (Recommended Alternative): Public ownership is the best way to insure quality water, diverse habitat and good fishing for future generations. The long range goal of public ownership of all lands within the fishery area boundary is a desirable objective. This master plan will recommend that acreage goals be increased commensurate with future expanding statewide acreage goals and funding sources necessary to accommodate the certain projected increases in the demand for recreational areas.

Reduce the Fishery Area: Public lands provide untold hours of recreational time for Wisconsin residents and out-of-state tourists. Attainment of goals and objectives would be impossible if the fishery area was reduced. This would be contrary to this agency's major function of preserving and perpetuating our renewable resources and providing user opportunities associated with them.

APPENDIX - Comments from Outside Reviewing Agencies and DNR Responses to the 45-day Review Copy.

A number of comments to the 45-day review copy of the Pine River System Master Plan were received from persons or agencies outside of the Department of Natural Resources. Their comments, and DNR responses, where pertinent, follow:

Forest Stearns, Chairman, Scientific Areas Preservation Council

Thank you for the opportunity to comment on the Pine River System Fishery Area draft Master Plan. Overall we feel the plan is well conceived and are in support of the project.

We do have a specific comment on the proposed addition of the 40 acre Parcel A (page 6, par. 7 and page 20, par. 6) to the project boundary. We appreciate this area being added at our request; however we feel that at least the western half of this 40 (the Clayton tract) should be classified as Public Use Natural Area rather than Resource Development 2 to preserve the forest canopy and diverse understory. The eastern half of Parcel A (the McDonald tract) is unevaluated by SAPC staff in terms of natural area values. This tract might also be considered for PUNA classification pending the result of future field inspection by our staff.

DNR Response: We concur. The entire 40 acres will be listed and managed as a public use Natural Area as requested.

Robert B. Heding, President, Central Wisconsin Chapter, Trout Unlimited, Oshkosh, WI

Page 3. Based on the stream frontage remaining to be acquired within the project boundary, the acreage goal does not appear adequate to meet the original objectives of the project.

DNR Response: It is not possible to increase acreage goals of the fishery area at this time as present Department policy has the statewide acreage goal locked at 1.3 million acres. This statewide goal will be evaluated in the future with consideration given to expanding the overall goal commensurate with changing public recreational needs.

A very good management plan. Approval of the plan at an early date is recommended.

DNR Response: The plan will receive a final editing and will then be presented to the Natural Resources Board for approval.

Larry Flyth, Hancock Conservation Club, Waushara County Conservation Congress, Plainfield, WI 54966

Everything looks like it will work out for the good of the county, fisherman, hunter, snowmobiler and general public.

I don't live on or near the Pine River so I am not sure how the people in that part of the county feel.

DNR Response: A public informational meeting was held on January 31, 1984 at the Waushara County Courthouse. Announcements of the meeting were sent out to the Town Board Chairmen and supervisors where the system is located, the County Board Chairman and Supervisors of the townships involved, County Conservation Congress delegates and members of Central Wisconsin and Fox Valley Chapters of Trout Unlimited. An article in the Waushara Argus and Oshkosh Northwestern Newspapers alerted the general public to this meeting. No organized opposition to the plan has developed and none is expected in the foreseeable future.

D. L. Cronkrite, District Director, Department of Transportation, Wisconsin Rapids, WI

There are no known interests by the DOT regarding the DNR-Pine River System Fishery Area.

There is minimal discussion related to transportation, such as the number of vehicles, and the condition of roadways and structures. Will the Pine River Fishery Area generate the need for changes in the highway system or replacement of a bridge or culvert?

DNR Response: The Pine River System Fishery Area will not materially affect the traffic pattern, use or needs of the highway system in the vicinity.

There are federal-aid highway routes within the area and any improvements of a highway or replacement of a bridge, which requires additional right of way and the work is funded with federal-aid, a 4(f) involvement would result. Arrangements to preclude this would be in the best interest of Waushara County.

Thank you for the opportunity to review and comment.

DNR Response: To avoid as many conflicts as possible, we presently contact the D.O.T. at Wisconsin Rapids when developing fishery area accesses or whenever acquisition abuts the right-of-way of roads on the state trunk highway system. This procedure will continue. We have a good working relationship with the county highway department.

Stanley A. Nichols, Wisconsin Geological and Natural History Survey, Madison, WI 53705

P. 6, par. 5 - These seem to be awfully expensive land values in an era of declining rural land values.

DNR Response: Price is a fact, value is an approximation. Prices paid in bona-fide transactions in the market are used to estimate contemplated market value or the most probable selling price of a specific parcel of land. This is the method used by the Department whenever it acquires real property.

P. 11, par. 3 - Flowery language isn't really needed.

DNR Response: Disagree - such introductions catch the interest of readers and is a method of writing used by many media sources in reporting on public informational documents and plans.

P. 12, last paragraph - The problems with the impacts of irrigated agriculture on the stream quality should be addressed in this section.

DNR Response: The potential problems with groundwater quality and supply are covered under Resource Management Problems on Page 21.

In general the geology and soils information uses outdated and meaningless terminology. This section should be written to related to the management situation at hand.

DNR Response: Disagree - for the purposes of this plan, section on geology and soils is adequate.

Mitchell G. Bent, Chairman, Wisconsin Trout Unlimited, DePere, WI 54115

The Wisconsin Council of Trout Unlimited appreciates this chance to comment on the proposed Pine River System Fishery Area MASTER PLAN in Waushara County, WI. Wisconsin Trout Unlimited has been a long-standing advocate of increased public ownership of property along trout streams in the state, for it enables the license-paying angler to enjoy trout fishing on more of the state's waters. Also, increased public ownership of

trout stream bank property permits additional expenditures of Inland Trout Stamp funds for habitat improvement. With regard to p. 6, paragraph 3, I would hope that the Department will look upon Trout Unlimited chapters as sources of not only support for the Master Plan, but also as sources of manpower and FUNDS for habitat improvement projects. Many TU chapters would like to help fund trout habitat projects; if the DNR would extend this opportunity to them, it would enable Trout Stamps revenues to be stretched further. Thank you!

DNR Response: In the paragraph cited, Trout Unlimited groups are recognized as action organizations that have donated time, money and manpower on project areas in central Wisconsin. The relationship with these groups on the local level in this part of the state is good and their dedication to the resource is recognized and appreciated.

Dick Lindberg, Liaison to the Wild Resources Advisory Council

The Wild Resources Advisory Council has requested me to forward the following comments regarding the plan for this property.

1. An excellent plan highlighted by:
 - a) descriptions of the natural areas contained by the property,
 - b) a recognition of what the future might hold for this property,
 - c) and a concern for the future of groundwater supplies as they might be effected by pesticides and drawdowns.
2. There is a question as to whether or not timber sale potentials should be advanced. The Council thinks they may be of more bother than worth and of possible detriment to forms of wildlife which may inhabit an undisturbed old growth forest.

DNR Response: It is recognized that trade-offs exist when land management practices are carried out. Some species of plants and animals will benefit while other life forms will be adversely affected. Limited timber sales will be the rule followed on property of the Pine River system fishery area.

3. Similarly (to # 2), the Council questions if the stream implants (structures, etc) will produce enough additional fish to justify their costs.

DNR Response: Instream habitat work of the future will be done to maintain existing trout productivity and not necessarily increase trout numbers. The goal of habitat management is to maintain, and if possible, improve living conditions of trout species (food base, cover, spawning area, water quality).

4. The plan should state an intent to exert extra effort to acquire the scientific area.

DNR Response: Two things are necessary before the scientific area can be acquired, namely, willing sellers and sufficient funding. The Scientific Areas Preservation Council is responsible for carrying out the intent of acquiring and preserving state-wide Scientific Areas. This agency's land purchase priority system will determine the effort exerted to acquire this area.

Roy C. Willey, Jr., Executive Director, East Central Wisconsin Regional Planning Commission, Menasha, WI 54952

The East Central Wisconsin Regional Planning Commission has reviewed the Pine River Fishery Master Plan as it relates to regional plans and programs for Waushara County. East Central finds the master plan to be consistent with natural resource and recreation plans for the area and therefore supports its approval.

Please attach these comments to the project file. If you have any questions, please contact East Central.

ENVIRONMENTAL IMPACT ASSESSMENT SCREENING WORKSHEET

(Attach additional sheets if necessary)

Title of Proposal: Pine River System Fishery Area Master Plan (Conceptual Element)

Location: County Waushara
 Township 20, 19 North, Range 10, 11, 12 East, West
 Section(s) Various ones - See attached map
 Political Town Rose, Springwater, Leon

Project:

1) General Description (overview)

Manage the Pine River System fishery area, Waushara County for quality trout fishing and accommodate other compatible recreational and educational activities within the capabilities of the land and water resources while maintaining the area's esthetic setting. Actions associated with this project are continued acquisition of lands within approved boundaries, habitat improvement to enhance living conditions for trout species, fish stocking, maintenance of fence, posting, cattle watering areas and parking lots. Sharecropping of suitable lands.

2) Purpose and Need (include history and background as appropriate)

Natural Resources Board policy dictates that each department property of significant public use or interest shall have a master plan prepared. The plans establish immediate and long range goals for the use of these properties. This assessment addresses the impact the master plan will have on the environment associated with the Pine River system.

Authorities and Approvals: 23.09

1) Statutory Authority to Initiate Master plans need approval through channels to final approval by Natural Resources Board

2) Permits or Approvals Required

3) Participants notified of above requirements? ☒ Yes ☐ No

4) Does this proposal comply with floodplain and local zoning requirements? ☒ Yes ☐ No

Estimated Cost and Funding Source.

\$579,000 - \$2,750,000; Funding sources from state, federal acquisition funds, trout stamp fund, force account funds.

Time Schedule:

1985-2000

EXISTING ENVIRONMENT

1) Physical (Topography-soils-water-air-wetland types)

The watershed topography is relatively hilly and rolling. The soil types range from sand to sandy loam. These soils readily allow water from precipitation (annually about 30") to percolate into the ground and become part of the ground water system. This continual recharge of ground water reserves account for the spring flow in and along the stream resulting in fairly stable stream flows.

2) Biological

a) Flora See attached maps for general cover types. Upland timber types include black oak, with some red and white oak. Under brush is composed of hazelbrush, blueberry, raspberry, young oak and cherry brush. Aspen are found near low areas within the oak type. Lowland timber types include Tamaraks, Elm & Ash. About 87 acres of red pine plantation is present. Approximately 112 acres of fields are sharecropped for agricultural products & to provide food patches for wildlife. Marsh areas are of the grassy sedge type to woody marsh areas with tag alder as the dominant species.

b) Fauna Principal fish species: Brown and brook trout, common sucker, hogsucker, muddler, common shiner, brook lamprey, golden shiner, johnny darter, dace and creek chub. Amphibians - Leopard and green frogs. Turtle species documented as present are snapper and painted.

Game and furbearers - deer, squirrel, cottontail rabbits, ruffed grouse, puddle ducks, coon, muskrats, fox, beaver, otter and mink. A variety of non-game birds and animals inhabit the area both seasonally and permanently. Sandhill crane inhabit low marsh areas in spring and summer and successful nesting activity occurs.

3) Social

A rural community setting of Central Wisconsin. A general farming area with dairy husbandry, cash crops and truck crops the primary agricultural products. Pine plantations and Christmas tree plantings interspersed throughout the area.

4) Economic

Local communities (populations 300-2000) with light industry. A highly developed region of irrigation farming for perishable cash crops. The tourist industry contributes heavily to the economy of the area.

5) Other (include archaeological, historical, etc.) The State Historical Society reports that there are no buildings or structures of known historical or architectural significance within the system. There are seven(7) known archeological sites within the system that are chiefly campsites & some burial mounds. Locations are as follows: TOWN OF SPRINGWATER

| | | | |
|-------------------------------|---------|------------|--------|
| SW $\frac{1}{4}$ of Section 3 | 3 sites | Section 16 | 1 site |
|-------------------------------|---------|------------|--------|

| | | | |
|-------------------------------|--------|------------|--------|
| W $\frac{1}{2}$ of Section 10 | 1 site | Section 22 | 1 site |
|-------------------------------|--------|------------|--------|

In addition to the sites listed above, there is a very high probability that there may be other as yet undiscovered sites within the system. Before any soil disturbing activities take place the Dept. of Nat. Res. will consult with the Historical Soc. to determine whether an archaeological survey is warranted.

PROPOSED ENVIRONMENTAL CHANGE

1) Manipulation of Terrestrial Resources (include quantities – sq. ft., cu. yds., etc.)

Vegetative manipulations on approx. 2.1 miles of stream to encourage marshmeadow type growth at the stream edge. Maintenance of property line fences, 13 parking lots and boundary posting of 1,650 acres will be a continuing program. Two snowmobile trails will continue to be maintained. Wildlife management actions that will be considered include expanding food and cover by planting, thinning, timber cutting and share-cropping on lands where benefit would be expected. About 112 acres of land will be sharecropped to provide food patches and nesting cover where appropriate.

2) Manipulation of Aquatic Resources (include quantities – cfs, acre feet, MGD, etc.)

Install instream devices (bank cover, rock wings, half logs, bank rip-rap) throughout approximately 3 miles of stream to improve habitat conditions for trout species.

3) Structures

No physical structures (buildings, shelters etc.) are anticipated.

4) Other

Actions on this property will include maintenance of signs, periodic issuance of fuel wood permits and limited harvest of oak lumber as needed by area stream habitat development and improvement. None of these activities involve environmental change beyond present management practices.

5) Attach maps, plans and other descriptive material as appropriate (list)

1. Property boundary maps showing ownership
2. Existing and planned development map
3. General cover map

PROBABLE ADVERSE AND BENEFICIAL IMPACTS (Include Indirect and Secondary Impacts)

1) Physical Impacts

No long term impact should result from proposed actions on the upland areas. Improvement work associated with the stream will result in stabilizing the stream banks, retarding erosion, providing cover for trout species, improving the environment for a variety of insect life (mayfly, stonefly, caddisfly). The area will remain aesthetically pleasing.

2) Biological Impacts

Planned action will result in a diversity of plant and animal species. Both on upland areas and in the aquatic environment.

3) Socioeconomic Impacts

a) Social

The availability of this open-space public hunting and fishing area to the general public will have a beneficial social impact. Outdoor activities are good for the body, mind and soul of man.

b) Economic

Use of the property by hunters, anglers, and non-consumptive users will have positive effects on the areas recreational economy by creating demand for overnight accommodations, restaurants, and other business related services and goods.

4) Other (include archaeological, historical, etc.; if none, so indicate.)

Surveys coordinated with the State Historical Society will be conducted at each site prior to development. If development threatens any significant historical or archaeological sites, appropriate protective measures will be taken.

PROBABLE ADVERSE IMPACTS THAT CANNOT BE AVOIDED

Noise and short term air pollution will result from the use of motorized equipment while carrying out the proposed actions. Aesthetics will suffer on a short term on projects involving vegetative manipulations along the stream. In just a couple of years these stream management project areas will revegetate and provide aesthetic settings that will be equal to the original condition.

RELATIONSHIP BETWEEN SHORT-TERM USES OF THE ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

The cumulative effects of the proposed actions will have a positive effect on the maintenance of present user-levels, preferred vegetation types and result in maintaining harvestable populations of fish, game and fur species as well as maintain preferred habitat types for non-game species.

IRREVERSIBLE OR IRRETRIEVABLE COMMITMENTS OF RESOURCES IF ACTION IS IMPLEMENTED

1) Energy

Fossil fuel loss associated with protection, maintenance and improvement actions that are proposed. This is a irretrievable commitment of fossil fuel resources.

2) Archaeological and historic features or sites

The State Historical Society reported a group of prehistoric burial mounds within the fishery boundary and further stated that there are likely to be more. Surveys will be coordinated with the State Historical Society at each site prior to development so as to properly protect all significant historical features.

3) Other

None

ALTERNATIVES (No Action-Enlarge-Reduce-Modify-Other Locations and/or Methods. Discuss and describe fully with particular attention to alternatives which might avoid some or all adverse environmental effects.)

The basic management program for the Pine River Fishery System is to protect, preserve, improve and provide public access to navigable waters of the state through public ownership. The analysis of alternatives is as follows:

DO NOTHING

If management practices were discontinued, trout habitat would deteriorate over time to the point where stocking of hatchery reared fish would be necessary to provide short term fishing opportunities.

The most productive trout streams in Central Wisconsin have open marsh meadow type stream edge. This type ecological niche will be lost through plant succession. Tamarack and Alder will encroach and cause deterioration of the stream channel. There will be a reduction of bank undercuts, pool cover and silting of spawning areas will reduce egg survival and recruitment of fish. Excessive shade will reduce aquatic vegetation causing a decrease in invertebrate insect life. Dead and dying trees will fall into the channel altering the flow and cause difficult fishing conditions.

Past investments in land acquisition and development could not be adequately protected because of disjointed land ownerships. Key parcels of land in the fishery system must be considered and in some way controlled to protect, maintain and improve for future generations. Public ownership is the best way to insure quality water, diverse habitat and good fishing for future generations.

Habitat preservation and improvement activities such as streambank rip-rap, instream device construction, streambank vegetation control and alleviating chronic upland erosion problems are expensive and private landowners lack incentive to get the work done. The end result leads to a general deterioration of a variety of habitat types.

Sub-divisions would eventually result on suitable stream frontage within the project boundary and trespass restrictions would deny the general public of suitable fishing frontage and access sites along a popular stream system.

A do nothing approach would mean increased pressure and public use of the existing areas under public ownership. Future users would find the present area over crowded and the quality of the outdoor experience reduced.

EXPAND THE PROJECT

Public ownership is the best way to insure quality water, diverse habitat and good fishing for future generations. The long range goal of public ownership of all lands within the project boundary is a desirable objective. This master plan will recommend that acreage goals be increased commensurating with the future expanding state wide acreage goals and funding sources necessary to accommodate the projected increases in the demand for recreational areas.

REDUCE THE PROJECT

Public lands provide untold hours of recreational fun for Wisconsin residents and out of state tourists. Attainment of goals and objectives would be impossible if the project area was reduced. This would be contrary to this agencies major function of preserving and perpetuating renewable resources and providing user opportunities associated with these resources.

EVALUATION (Discuss each category. Attach additional sheets and other pertinent information if necessary.)

- 1) As a result of this action, is it likely that other events or actions will happen that may significantly affect the environment? If so, list and discuss. (Secondary effects)

No events or actions resulting from this master plan are likely to occur which would significantly affect the environment. Assuring that public lands are models of sound resource management might rub off on private riparian owners to follow our example.

- 2) Does the action alter the environment so a new physical, biological or socio-economic environment would exist? (New environmental effect)

The proposed actions will not alter the environment to the extent that any new physical, biological, or socio-economic environment would result.

- 3) Are the existing environmental features that would be affected by the proposed action scarce, either locally or statewide? If so, list and describe. (Geographically scarce)

No

- 4) Does the action and its effect(s) require a decision which would result in influencing future decisions? Describe (Precedent setting)

The actions proposed are the best known to manage the renewable resources involved. All actions are tried and proven effective in maintaining or improving the principal life forms associated with the project area.

- 5) Discuss and describe concerns which indicate a serious controversy? (Highly controversial)

Trout stream habitat improvement is an accepted technique in the management of this resource. The draft copy of this master plan will be reviewed by local, state and federal agencies. No conflicts are anticipated.

- 6) Does the action conflict with official agency plans or with any local, state or national policy? If so, how? (Inconsistent with long-range plans or policies)

No. It is consistent with the master plan for this property, and with state and national concerns for the protection and enhancement of our natural resources.

- 7) While the action by itself may be limited in scope, would repeated actions of this type result in major or significant impacts to the environment? (Cumulative impacts)

It is the policy of the Natural Resources Board that all department properties with substantial public interest have master plans developed. Therefore, more such plans will be drawn up in the future.

- 8) Will the action modify or destroy any historical, scientific or archaeological site?

Any historical or archaeological sites located on land owned by the Department will be protected.

- 9) Is the action irreversible? Will it commit a resource for the foreseeable future? (Foreclose future options)

This master plan will commit the resources of the Pine River Fishery area to the management activities described. It does not foreclose future options as there exists the avenue of reassessment of the plan and introducing additional actions through presentation of such revised actions through the Department of Natural Resources Board.

- 10) Will action result in direct or indirect impacts on ethnic or cultural groups or alter social patterns? (Socio-cultural impacts)

No

- 11) Other

None

This decision is not final until certified by the appropriate District Director or the Director of BEI. If you believe you have a right to challenge this decision, you should know that Wisconsin Statutes and Administrative Codes establish time periods within which requests to review Department decisions must be filed. For judicial review of a decision pursuant to ss. 227.15 and 227.16, Stats., you have 30 days after service of the decision to file your petition for review. The respondent in an action for judicial review is the Department of Natural Resources. You may wish to seek legal counsel to determine your specific legal rights to challenge a decision. This notice is provided pursuant to s. 227.11(2), Stats.

6-14-85
BT

LIST OF AGENCIES, GROUPS AND INDIVIDUALS CONTACTED REGARDING THE PROJECT

Include DNR Personnel and Title

| Date | Contact | Comments |
|--------------------------------------|---|--|
| Will go out for 45 day review period | Waushara Co. Planning Office County & township Gov't State Geologist Conservation Congress State Historical Society Wild Resources Advisory Council U.S. Fish & Wildlife Service East-Central Regional Planning Commission | Modifications resulting from the input solicited of these agencies will be incorporated into the master plan |

RECOMMENDATION

EIS Not Required ☒

Analysis of the expected impacts of this proposal is of sufficient scope and detail to conclude that this is not a major action which would significantly affect the quality of the human environment. In my opinion therefore, an environmental impact statement is not required before the Department undertakes this action.

Refer to Office of the Secretary ☐

Major and Significant Action: Prepare EIS ☐

Additional factors, if any, affecting the evaluator's recommendation:

The Pine River Fishery Area Master Plan describes a management plan designed to assure continued use levels of those resources and associated benefits that are consistent with the capabilities of the property.

No significant development or changes in present land-uses are anticipated and as a result, it is the opinion of the evaluator that no environmental impact statement is required.

However, no set of indicators in a complex situation can be combined for a total answer to a question without an examination of external forces that act on the subject in question.

| | |
|---|-----------------|
| SIGNATURE OF EVALUATOR <i>Michael J. Dunning</i> | DATE 2-25-83 |
|---|-----------------|

| | |
|---|------|
| CERTIFIED TO BE IN COMPLIANCE WITH WEP A | |
| DISTRICT OR BUREAU DIRECTOR (OR DESIGNEE) | DATE |

RLF
5-3-83

| | |
|---|-----------------|
| APPROVED (if required by Manual Code) | |
| DIRECTOR, BEI <i>Rogell J. [Signature]</i> | DATE 6-14-85 |

This decision is not final until approved by the appropriate Director and/or Director, BEI.

CORRESPONDENCE/MEMORANDUM

STATE OF WISCONSIN

Date: June 13, 1985

File Ref: 1610

JUN 14 1985

To: Roger Fritz - Madison Office

From: Michael J. Primising - Wautoma

mjp

Subject: Pine River Fishery Area EA

The public comment period ended June 7, 1985 for the Department's Environmental Assessment Review. I received no comments either verbally or in written form concerning this document.

Attached is an addendum to the original Environmental Assessment that addresses the items in Al Stranz memo dated March 6, 1985.

MJP:jcl

NOTED:

Date

ADDENDUM TO PINE RIVER FISHERY AREA MASTER PLAN EA NO. 1880

1. If approved by the Natural Resources board, the acreage goal for the system would be 1996 acres, leaving 336.89 acres to be acquired.

Present

- ~~Permit~~ area under public ownership includes 1,650.52 acres in fee title plus 8.59 acres in perpetual easement agreements for a grand total of 1,659.11 acres.
2. No endangered or threatened species of fish, amphibians, molluses, mammals, birds, reptiles or wild plants are known to be present on the property presently under public ownership.
 3. No buildings, homes or structures are anticipated to be purchased within project boundaries. If such structures are purchased, the buildings with a parcel of land around them are offered for sale or trade for other lands within the project boundary or sold under bid to be moved off the property or taken down for salvagable materials.
 4. In the foreseeable future, no dams will be acquired by the department within the project boundaries. If a dam was included in future purchases (i.e. Idlewild Mill-pond dam structure), the department would submit an application to abandon the dam structure and return the stream to channel status.
 5. The preparer of the E.A. was Mike Primising, Project Manager for the Pine River Fishery System.

